Petrophyton caespitosum (Nutt.) Rydb**.** var. ***caespitosum***

caespitose rockmat
Rosaceae (Rose Family)

Status: State Threatened
Rank: G4T?S1

General Description: Adapted from Hitchcock et al. (1961): A perennial subshrub or shrub that is strongly caespitose and forms cushions or mats up to 3 ft. (1 m) broad. The leaves are spatulate to oblanceolate, ¼ to ½ in. (5 to 14 mm) long, 1/32 to 1/8 in. (1 to 4 mm) broad, 1-nerved, grayish-green on both surfaces and have long, silky, slender hairs, which are usually appressed. The peduncles are ¼ to 3 1/8 in. (1 to 8 cm) tall with several reduced bractlike leaves. The racemes are closely crowded, spikelike, sometimes more or less compound at the base, and ¼ to 2 in. (1 to 5 cm) long. The calyx has long, silky, slender hairs which are usually appressed and/or rough, stiff trichomes. The hypanthium (lower portion of calyx) is turbinate (slenderly cup-shaped), about 1/32 in. (1 mm) long, and slightly exceeded by the lanceolate-triangular, erect lobes. The disc has a prominent, entire margin projecting above the point of insertion of the petals and stamens. The petals are white, spatulate-oblanceolate, and from half as long to as long as the sepals. There are 20 stamens with slender, hairless filaments that are about twice as long as the petals. There are 3 to 6 pistils with slender styles, nearly 1/8 in. (3 mm) long, that slightly possess long, soft, shaggy trichomes. The follicles are hairless to sparsely covered with long, soft, shaggy trichomes and are about 1/16 in. (2 mm) long.

Identification Tips: There are three species in the genus *Petrophyton* in the Pacific Northwest. *P. caespitosum* can be distinguished from the other two species by its leaves and style. The leaves of *P. caespitosum* are 1-nerved on the lower surface and they have long, silky, slender hairs, which are usually appressed. The style of *P. caespitosum* is about 1/8 in. (3 mm) long. The leaves of *P. cinerascens* (also rare) and *P. hendersonii* are 3-nerved and hairless to possessing long, silky, slender hairs, which are usually appressed. The style of these two species is 1/32 to 1/16 in. (1 to 2 mm) long.

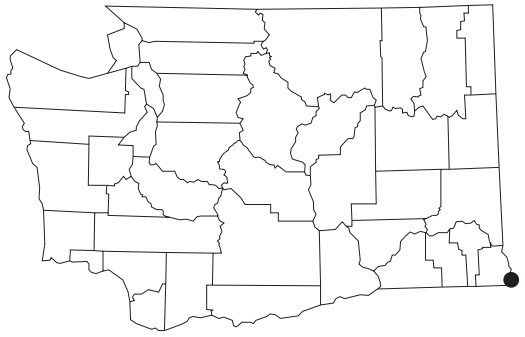
Phenology: The taxon is identifiable from late June to August.

Range: This taxon ranges from northeastern Oregon to California, east to Idaho, Montana, and South Dakota, and south to Wyoming, Utah, Colorado, Arizona, New Mexico, and Texas. An isolated occurrence is also known in Asotin County, Washington.

Petrophyton caespitosum var. ***caespitosum***

caespitose rockmat

Known distribution
of *Petrophyton caespitosum*
var. *caespitosum*
in Washington



● Current (1980+)
○ Historic (older than 1980)

Petrophyton caespitosum var. ***caespitosum***
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Photo by Oregon State University

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Habitat: *Petrophyton caespitosum* var. *caespitosum* grows almost entirely on shelving rocks (granitic or limestone) from the foothills to alpine summits. In Washington, this taxon has been found on limestone cliffs and ledges at an elevation of 2200 ft (671 m). Associated species include Leiberg's bluegrass (*Poa leibergii*), shootingstar (*Dodecatheon* sp.), northern false coolwort (*Bolandra oregona*), wedgeleaf draba (*Draba cuneifolia*), dwarf greasebush (*Glossopetalon pungens*), American red raspberry (*Rubus idaeus*), and slender lipfern (*Cheilanthes feei*).

Ecology: This taxon prefers relatively dry limestone cliffs and ledges at mid elevations.

State Status Comments: The taxon is known from one recent occurrence in Asotin County. Very little information about this population is available.

Inventory Needs: Limestone areas in Asotin County should be systematically surveyed for additional populations. The one known occurrence should be revisited, and additional information should be gathered.

Threats and Management Concerns: Current threats include mining, the spread of weeds from adjacent heavily grazed areas, and disturbance from rock climbers.

Comments: Hitchcock refers to this species as *Petrophytum caespitosum*. It is unlikely that this taxon occurs anywhere else in Washington because most limestone in the state is too wet and/or in high elevation areas, where this species is less likely to occur.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest* Part 3: *Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.

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